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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/801,089	03/15/2004	Toshihiro Sawamoto	9319S-000661 9501		
27572	7590 08/23/2005		EXAMINER		
HARNESS	, DICKEY & PIERCE,	MAI, ANH D			
P.O. BOX 8	28 ELD HILLS, MI 48303		ART UNIT PAPER NUMBER		
<b>55</b> 00 m 12	<b>220</b> 0		2814		
			DATE MAILED: 08/23/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Examiner		Application No.	Applicant(s)				
Períod for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE of this communication appears on the cover sheet with the correspondence address—Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  The MAILING DATE of THIS COMMUNICATION.  If the period for reply secretical shore is less has briting (30) stays, a reply which the attence y minimum of thing (20) stays will be considered treaty.  If the period for reply secretical shore is less has briting (30) stays, a reply which the attence y minimum of thing (20) stays will be considered treaty.  If the period for reply secretical shore is less has briting (30) stays, a reply which the attence y minimum of thing (20) stays will be considered treaty.  If the period for reply secretical shore is less has briting (30) stays, a reply which the attence y minimum of thing (20) stays will be considered treaty.  If the period for reply which the art of excent short the period of the short than the corresponding to the state of the short than the corresponding to the state of the short than the corresponding to the short than the corresponding to the short than the corresponding to the short than the replication.  If the period is a short than the corresponding to the short than the replication is non-final.  It is action is FINAL.  It is action is FINAL.  It is short that the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  If the above claim(s) 1.16 is/are pending in the application.  A) Claim(s) 1.15 is/are pending in the application.  A) Of the above claim(s) 1.13 is active the properties of the property documents have been received in this National Stage applicatio		10/801,089	SAWAMOTO, TOSHIHIRO				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Educations of the may be available under the provision of 37 CFR 1.156(a). In no event, however, may a reply be timely filled after SIX (§) MODITIFE from the mailing date of this communication.  Educations of the may be available under the provision of 37 CFR 1.156(a). In no event, however, may a reply be timely filled after SIX (§) MODITIFE from the mailing date of this communication.  Education of the provision of the communication of 37 CFR 1.156(a). In no event, however, may a reply be timely filled on the communication.  Flather to reply within the set of extended precide for reply will, by statutory period via logical syst will epic set (MONTH) from the mailing date of this communication.  Flather to reply will be a set of the communication of the	Office Action Summary	Examiner	Art Unit				
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  **Certains of time may be available under the provision of 30°CPR 1.35(8). In no event, however, may a reply be timoly filled  **If the period for reply specified above is feet she in thiry (30) days, a neply within the statutory minimum of thirty (30) days will be considered timaty.  **If the period to reply specified above, the meanine allotury period value gaps and with regine \$2.65 (9) 00000000000000000000000000000000000		pears on the cover sheet with the	correspondence address				
1) Responsive to communication(s) filed on <u>02 August 2005.</u> 2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) <u>1-16</u> is/are pending in the application. 4a) Of the above claim(s) <u>13-16</u> is/are withdrawn from consideration.  5) Claim(s) <u>3-12</u> is/are allowed. 6) Claim(s) <u>1 and 2</u> is/are rejected.  7) Claim(s) <u>1 and 2</u> is/are rejected to.  8) Claim(s) <u>1 and 2</u> is/are rejected to.  8) Claim(s) <u>1 and 2</u> is/are rejected to.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on <u>15 March 2004</u> is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in Interview summary (PTO-413) Paper No(s)Mail Date  * See the attached detailed Office action for a list of the certified copies not received.	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any						
2a) This action is FINAL. 2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-16 is/are pending in the application.  4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.  5) Claim(s) 3-12 is/are allowed.  6) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 15 March 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Palen Drawing Review (PTO-945)  3) Notice of Internal Patent Application (PTO-152)  5) Notice of Informal Patent Application (PTO-152)  5) Notice of Informal Patent Application (PTO-152)  6) Other:			•				
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a) ⊠ All b) ☐ Some * c) ☐ None of:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 1/22 of 304 of 34 14 of 56 60 ☐ Other:	Priority under 35 U.S.C. § 119						
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Application/Control Number: 10/801,089 Page 2

Art Unit: 2814

#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-12 in the reply filed on August 02, 2005 is acknowledged.

## Specification

- 2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- 3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

SEMICONDUCTOR DEVICE HAVING PLURALITY OF LANDS THAT HAVE DIFFERENT THICKNESSES FORMED ON A CARRIER SUBSTRATE.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-2 are rejected under 35 U.S.C. 102(B) as being anticipated by Nakano (JP. Patent No. 10-340928).

Application/Control Number: 10/801,089 Page 3

Art Unit: 2814

Nakano teaches a semiconductor device as claimed including:

a carrier substrate (1) having a plurality of lands (2) that have different thicknesses from each other; and

a semiconductor chip (4) mounted to the carrier substrate (1). (See Fig. 2c).

With respect to claim 2, the thickness of each of the lands (2) gradually varies from the inner region to the outer region of the carrier substrate (1).

### Allowable Subject Matter

- 6. Claims 3-12 are allowed.
- 7. The following is an examiner's statement of reasons for allowance: prior art of record fails to teaches a semiconductor device in the combination of the limitations as claimed including:
- a) a first semiconductor package having a plurality of first lands that have different thicknesses from each other, and second semiconductor packages, each having a plurality of second lands that have different thicknesses from each other, the second lands being arranged opposite the first lands.
- b) a first and a second carrier substrates having a plurality of first and second lands, respectively, that have different thicknesses from each other; and the second lands being arranged opposite the first lands.

Application/Control Number: 10/801,089 Page 4

Art Unit: 2814

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh D. Mai whose telephone number is (571) 272-1710. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANHAD. MAI PRIMARY EXAMINER